

### ABSTRACT OF THE DISCLOSURE

An improved nanotip structure and method for forming the nanotip structure and a display system using the improved nanotip structure is described. The described nanotip is formed from a semiconductor having a crystalline structure such as gallium nitride. The crystalline structure preferably forms dislocations oriented in the direction of the nanotips. One method of forming the nanotip structure uses the relatively slow etching rates that occur around the dislocations compared to the faster etch rates that occur in other parts of the semiconductor structure. The slower etching around dislocations enables the formation of relatively high aspect ratio nanotips in the dislocation area.